

GEOG3600. Geographical Information Systems

Geographical Space and Phenomena

Objectives

This tutorial is designed to introduce the concept of spatial-temporal space in geographical representation. A simple exercise is undertaken by individual students and it is then followed by the guided discussion led by the course tutor. Students are required to examine the geographical space and phenomena in their daily life and find a simple way to represent such space and phenomena.

Exercise

1. A base map is provided to you, on which x and y represent location, and z represents time.
2. Draw z axis and label the time in scale (you only need to show your movement from 0800 - 2200)
3. Plot the destinations of your journey yesterday in different layers (for example, Hong Kong Baptist University in the layer of 0930).
4. Draw lines to connect these plots, and the final drawing represents your yesterday's spatio-temporal movements.
5. Draw another representation for one of your classmates on the same diagram.
6. You may add a couple more representations for other classmates to make a more complete spatio-temporal movement model.

Discussion

7. Under the leadership of your tutor, discuss the result. The discussion topics include:
 - a) How many dimensions a geographical (i.e. spatio-temporal) space should have? Why?
 - b) While trying to simplify the geographical representation, what kind of details may be omitted under what circumstances?
 - c) Except the geographical representation that you have described with your spatio-temporal movement model, list two more examples illustrating the representation of geographical space and phenomena. To do so, you must make sure that your representation is controlled within 3 dimension in space or time and DO NOT make another similar case as what you have done in your exercise!